

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII 901 NORTH 5TH STREET KANSAS CITY, KANSAS 66101

June 6, 2001

Junior Flowers Missouri Tie and Timber Highway 72 West Reynolds, MO 63666

Re:

Transmittal of Analytical Results

Missouri Tie and Timber RCRA ID No. Non-notifier

Dear Mr. Flowers:

Enclosed you will find copies of the analytical results from the waste, soil, drinking and surface water samples that were collected at the above-referenced facility on March 7, 2001, by the U.S. Environmental Protection Agency. In addition, I have enclosed a copy of Missouri Department of Natural Resources *Used Oil and Oil-Contaminated Waste* Technical Bulletin for your information.

If you have any questions regarding this information, please contact me at (913) 551-7049.

Sincerely, Dadail Newsome

Dedriel Newsome

Environmental Engineer

Air and RCRA Compliance Branch

Environmental Services Division

Enclosure

cc:

K. Flippin, MDNR (w/ encl)

Gary Gaines, MDNR Southeast Regional Office



R00182471

RCRA RECORDS CENTER



United States Environmental Protection Agency

Region 7 Laboratory 25 Funston Road Kansas City, KS 66115

Date: 4/6/2001

Subject: Transmittal of Sample Analysis Results for ASR #: 827

Activity Number: DLN14

Activity Description: Missouri Tie and Timber

From: Michael Thomas, Associate Laboratory Director

Regional Laboratory, Environmental Services Division

To: Dedriel Newsome

ENSV/ARCM

This is the sample analysis results transmittal for the above-referenced Analytical Services Request (ASR). The data contained in this transmittal have been approved by the Regional Laboratory. This transmittal contains all of the sample analysis results for this ASR. The Regional Laboratory should be notified within 14 days if any changes are needed to the contents of this report. If you have any questions, comments or data changes, please contact the Laboratory Customer Service Department at 913-551-5295.

cc: Analytical Data File

Summary of Activity Information

4/6/2001

Activity Leader: Newsome, Dedriel

Org: ENSV/ARCM

Phone: (913) 551-7049

Activity Number: DLN14

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Activity Desc: Missouri Tie and Timber

Location: Bunker

State: Missouri

Type: RCRA

Purpose: Enforcement

Explanation of Codes, Units and Qualifiers used on this report.

Sample QC Codes: QC Codes identify the type of

sample for quality control

= Field Sample

FD = Field Duplicate

Units: Specific units in which results are reported.

Deg C = Degrees Celsius

Deg C = Degrees Ceisius

mg/kg = Milligrams per Kilogram mg/L = Milligrams per Liter

SU = Standard Units (pH)

ug/kg = Micrograms per Kilogram

ug/L = Micrograms per Liter

Data Qualifiers: Specific codes used in conjunction with data values to provide additional information

on the quality of reported results, or used to explain the absence of a specific value.

(Blank) = Values have been reviewed and found acceptable for use.

K = Actual value of the sample is less than the value reported.

L = Actual value of the sample is greater than the value reported.

U = Not detected at or above the reportable level shown.

ASR Number: 827

Sample Information Summary

Activity Desc: Missouri Tie and Timber

Sample QC Numbe Code	Matrix	Location	External Sample No.	Start Date	Start Time	End Date	End Time	Receipt Date
100	Hazardous	Drip pad waste from drip pad collection system taken near South wall near RR tracks on West side		03/07/2001	13:45	03/07/2001	13:46	03/08/2001
101	Soil	T-Building wood storage area sample taken in drop areas		03/07/2001	14:00	03/07/2001	14:05	03/08/2001
101 -FD	Soil	T-Building wood storage area/Duplicate of sample 101		03/07/2001	14:00	03/07/2001	14:05	03/08/2001
102	Soil	Background soil sample taken approx. 100 yds. South of office bldg.		03/07/2001	14:20	03/07/2001	14:25	03/08/2001
205	Water	Collection Pond water sample		03/07/2001	16:05	03/07/2001	16:18	03/08/2001
208	Water	Drinking water from on-site well near boiler		03/07/2001	15:50	03/07/2001	15:57	03/08/2001

RLAB Approved Analysis Comments

4/6/2001

Activity Number: DLN14

Analysis

Activity Desc: Missouri Tie and Timber

Comments About Results For This Analysis

TCLP Semi-Volatiles in Hazardous

The laboratory reported 3-methylphenol and 4-methylphenol as an isomer pair. As a result, 3methylphenol is not reported individually.

TCLP Semi-Volatiles in Soil

The laboratory reported 3-methylphenol and 4-methylphenol as an isomer pair. As a result, 3methylphenol is not reported individually.

Total Metals Analysis of TCLP Metals in Soil by ICAP

Slight chromium contamination was found in the laboratory method blank. Only samples containing this compound at a level greater than five times the contamination level of the blank are reported without being qualified. All samples that contained this compound but at a level less than five times the contamination in the blank have the result "U-coded" indicating the method reporting limit has been raised to the level found in the sample. Samples affected were 827-101 and 827-101FD.

Total Semivolatiles of TCLP compounds in Hazardous Waste

The laboratory reported 3-methylphenol and 4-methylphenol as an isomer pair. As a result, 3methylphenol is not reported individually.

Total Semivolatiles of TCLP compounds in Solids

The laboratory reported 3-methylphenol and 4-methylphenol as an isomer pair. As a result, 3methylphenol is not reported individually.

ASR Number: 827

Activity Desc: Missouri Tie and Timber

RLAB Approved Sample Analysis Results

Analysis / Analyte	Units	100	101	101-FD	102
Flashpoint of Hazardous Samples					
Flashpoint	Deg C	79 L			
oH of Hazardous Sample					
	SU	6.7			
pH	30	0.7			
TCLP Metals in Haz. Waste					
Arsenic	mg/L	0.025 U			
Barium	mg/L	0.08			
Cadmium	mg/L	0.005 U			
Chromium	mg/L	0.005 U			
Lead	mg/L	0.025 U			
Selenium	mg/L	0.05 U			
Silver	mg/L	0.005 U			
TCLP Semi-Volatiles in Hazardous					
1,4-Dichlorobenzene	mg/L	0.00064 U			
2,4-Dinitrotoluene	mg/L	0.00073 U			
Hexachlorobenzene	mg/L	0.0005 U			
Hexachlorobutadiene	mg/L	0.00059 U			
Hexachloroethane	mg/L	0.00071 U			
2-Methylphenol	mg/L	0.014 U			
4-Methylphenol	mg/L	0.18			
Nitrobenzene	mg/L	0.00075 U			
Pentachlorophenol	mg/L	0.0012 U			
Pyridine	mg/L	0.0021 U			
2,4,5-Trichlorophenol	mg/L	0.0017 U			
2,4,6-Trichlorophenol	mg/L	0.0017 U			
Total Metals of TCLP in Hazardous	Samples by ICAP				
Arsenic	mg/kg	125 U			
Barium	mg/kg	50 U			
Cadmium	mg/kg	25 U			
Chromium	mg/kg	25 U			
Lead	mg/kg	125 U			
Selenium	mg/kg	250 U			
Silver	mg/kg	25 U			
Total Semivolatiles of TCLP compo	unds in Hazardous V	Vaste			
1,4-Dichlorobenzene	mg/kg	11.8 U			
2,4-Dinitrotoluene	mg/kg	9.1 U			
Hexachlorobenzene	mg/kg	13.6 U			
Hexachlorobutadiene	mg/kg	10.9 U			
Hexachloroethane	mg/kg	15 U			
2-Methylphenol	mg/kg	43.1 U			
4-Methylphenol	mg/kg	35.2 U			
Nitrobenzene	mg/kg	12.9 U			
Pentachlorophenol	mg/kg	24.1 U			
Pyridine	mg/kg	198 U			
2,4,5-Trichlorophenol	mg/kg	21.7 U			
	mg/ng	21			



Activity Desc: Missouri Tie and Timber

ASR Number: 827

RLAB Approved Sample Analysis Results

Analysis / Analyte	Units	100	101	101-FD	102
Arsenic	mg/L		5.0 K	5.0 K	
Barium	mg/L		100 K	100 K	
Cadmium	mg/L		1.0 K	1.0 K	
Chromium	mg/L		5.0 K	5.0 K	
Lead	mg/L		5.0 K	5.0 K	
Selenium	mg/L		1.0 K	1.0 K	
Silver	mg/L		5.0 K	5.0 K	
TCLP Semi-Volatiles in Soil					
1,4-Dichlorobenzene	mg/L		0.00064 U	0.00064 U	
2,4-Dinitrotoluene	mg/L		0.00073 U	0.00073 U	
Hexachlorobenzene	mg/L		0.0005 U	0.0005 U	
Hexachlorobutadiene	mg/L		0.00059 U	0.00059 U	
Hexachloroethane	mg/L		0.00071 U	0.00071 U	
2-Methylphenol	mg/L		0.0014 U	0.0014 U	
4-Methylphenol	mg/L		0.0013 U	0.0013 U	
Nitrobenzene	mg/L		0.00075 U	0.00075 U	
Pentachlorophenol	mg/L		0.0012 U	0.0012 U	
Pyridine	mg/L		0.0021 U	0.0021 U	
2,4,5-Trichlorophenol	mg/L		0.0017 U	0.0017 U	
2,4,6-Trichlorophenol	mg/L		0.0017 U	0.0017 U	
Total Metals Analysis of TCLP M	etals in Soil by ICAP				
Arsenic	mg/kg		2.6 U	2.6 U	5.2
Barium	mg/kg		15	15.2	124
Cadmium	mg/kg		0.52 U	0.52 U	0.67
Chromium	mg/kg		5.5 U	4.2 U	11.4
Lead	mg/kg		3.1	6.1	27.6
Selenium	mg/kg		5.2 U	5.2 U	6.7
Silver	mg/kg		0.52 U	0.52 U	0.67
Total Semivolatiles of TCLP com	npounds in Solids				
1,4-Dichlorobenzene	ug/kg		200 U	200 U	26
2,4-Dinitrotoluene	ug/kg		160 U	160 U	20
Hexachlorobenzene	ug/kg		230 U	230 U	30
Hexachlorobutadiene	ug/kg		190 U	190 U	24
Hexachloroethane	ug/kg		260 U	260 U	33
2-Methylphenol	ug/kg		740 U	740 U	96
4-Methylphenol	ug/kg		610 U	610 U	78
Nitrobenzene	ug/kg		220 U	220 U	29
Pentachlorophenol	ug/kg		410 U	410 U	54
Pyridine	ug/kg		3400 U	3400 U	440
2,4,5-Trichlorophenol	ug/kg		370 U	370 U	48
2,4,6-Trichlorophenol	ug/kg		360 U	360 U	47

Activity Desc: Missouri Tie and Timber

RLAB Approved Sample Analysis Results

Analysis / Analyte	Units	205	208		-4.
Metals in Water by ICP					
Aluminum	ug/L	10900	100 U		
Antimony	ug/L	20 U	20 U		
Arsenic	ug/L	25 U	25 U		
Barium	ug/L	86.3	30		
Beryllium	ug/L	1 U	1 U		
Cadmium	ug/L	5 U	5 U		
Calcium	mg/L	12.7	48.6		
Chromium	ug/L	13.6	5.2		
Cobalt	ug/L	5 U	5 U		
Copper	ug/L	10 U	10 U		
Iron	ug/L	8980	50 U		
Lead	ug/L	25 U	25 U		
Magnesium	mg/L	6.4	26.7		
Manganese	ug/L	130	5 U		
Molybdenum	ug/L	10 U	10 U		
Nickel	ug/L	15 U	15 U		
Potassium	mg/L	3.6	2 U		
Selenium	ug/L	50 U	50 U		
Silver	ug/L	5 U	5 U		
Sodium	mg/L	5.4	3.2		
Thallium	ug/L	30 U	30 U		
Titanium	ug/L	139	5 U		
Vanadium	ug/L	23.8	5 U		
Zinc	ug/L	22.9	72		
pH of Water					
pH	SU	7.2	7.5		
Semi-Volatile Organic Compounds in					
Acenaphthene	ug/L	0.16 U	0.16 U	l	
Acenaphthylene	ug/L	0.2 U	0.2 U		
Anthracene	ug/L	0.14 U	0.14 L		
Benzo(a)anthracene	ug/L	0.099 U	0.099 L		
Benzo(a)pyrene	ug/L	0.1 U	0.1 L		
Benzo(b)fluoranthene	ug/L	0.13 U	0.13 L	J	
Benzo(g,h,i)perylene	ug/L	0.11 U	0.11 L		
Benzo(k)fluoranthene	ug/L	0.12 U	0.12 l		
Benzoic acid	ug/L	1.3 U			
Benzyl alcohol	ug/L	0.96 U			
bis(2-Chloroethoxy)methane	ug/L	0.32 U	0.32 \	J	
bis(2-Chloroethyl)ether	ug/L	0.4 U	0.4	J	
bis(2-Chloroisopropyl)ether	ug/L	0.33 U	0.33	J .	
bis(2-Ethylhexyl)phthalate	ug/L	0.83 U	0.83	J	
4-Bromophenyl-phenylether	ug/L	0.35 U	0.35	U	
Butylbenzylphthalate	ug/L	0.94 U	0.94	U	
Carbazole	ug/L	2 L	2	U	
4-Chloro-3-methylphenol	ug/L	1.2 L	1.2	U	
4-Chloroaniline	ug/L	1.2 L	1.2	υ	
2-Chloronaphthalene	ug/L	0.69 L	0.69	U	
2-Chlorophenol	ug/L	1.3 L			

Activity Desc: Missouri Tie and Timber

ASR Number: 827

RLAB Approved Sample Analysis Results

nalysis / Analyte	Units	205		208		
4-Chlorophenyl-phenylether	ug/L	0.28	J	0.28	U	
Chrysene	ug/L	0.11	J	0.11	U	
Di-n-butylphthalate	ug/L	0.31	U	0.31	U	
Di-n-octylphthalate	ug/L	0.31	U	0.31	U	
Dibenz(a,h)anthracene	ug/L	0.13	U	0.13	U	
Dibenzofuran	ug/L	0.6	U	0.6	U	
1,2-Dichlorobenzene	ug/L	0.86	U	0.86	U	
1,3-Dichlorobenzene	ug/L	0.54	U	0.54	U	
1,4-Dichlorobenzene	ug/L	0.64	U	0.64	U	
3,3'-Dichlorobenzidine	ug/L	1.4	U	1.4	U	
2,4-Dichlorophenol	ug/L	1.2	U	1.2	U	
Diethylphthalate	ug/L	0.3	U	0.3	U	
2,4-Dimethylphenol	ug/L	1.5	U	1.5	U	
Dimethylphthalate	ug/L	0.23	U	0.23	U	
4,6-Dinitro-2-methylphenol	ug/L	2	U	2	U	
2.4-Dinitrophenol	ug/L	2.4	U	2.4	U	
2,4-Dinitrotoluene	ug/L	0.73		0.73	U	
2,6-Dinitrotoluene	ug/L	0.89	U	0.89		
Fluoranthene	ug/L	1.3		0.12	U	
Fluorene	ug/L	0.17	U	0.17	U	
Hexachlorobenzene	ug/L	0.5	U	0.5	U	
Hexachlorobutadiene	ug/L	0.59		0.59	U	
Hexachlorocyclopentadiene	ug/L	0.6		0.6	U	
Hexachloroethane	ug/L	0.71	U	0.71	U	
Indeno(1,2,3-cd)pyrene	ug/L	0.15	U	0.15	U	
Isophorone	ug/L	0.81	U	0.81	U	
2-Methylnaphthalene	ug/L	0.72	U	0.72	U	
2-Methylphenol	ug/L	1.4	U	1.4	U	
4-Methylphenol	ug/L	1.3	U	1.3	U	
Naphthalene	ug/L	0.18	U	0.18	U	
2-Nitroaniline	ug/L	0.78		0.78	U	
3-Nitroaniline	ug/L	0.53	U	0.53	U	
4-Nitroaniline	ug/L	0.86	U	0.86	U	
Nitrobenzene	ug/L	0.75	U	0.75	U	
2-Nitrophenol	ug/L	1.3	U	1.3	3 U	
4-Nitrophenol	ug/L	1.4	U	1.4	l U	
N-nitroso-di-n-propylamine	ug/L	0.41	U	0.41	U	
N-nitrosodiphenylamine	ug/L	0.33	U	0.33	3 U	
Pentachlorophenol	ug/L		U		2 U	
Phenanthrene	ug/L	0.11			1 U	
Phenol	ug/L		U		1 U	
Pyrene	ug/L	0.092		0.09		
1,2,4-Trichlorobenzene	ug/L		U		7 U	
2,4,5-Trichlorophenol	ug/L		, U		7 U	
2,4,6-Trichlorophenol	ug/L		, U		7 U	



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL SERVICES DIVISION REGION 7 25 FUNSTON ROAD KANSAS CITY, KANSAS 66115

MAY 2 4 2001

Date:	MA 7 4 5001
MEMOR	ANDUM
SUBJECT	T: Data Transmittal for ASR #:
	Site Description: Missouri Tre and Timber
FROM:	Dale Bates, Program Manager M. Jugnus Regional Laboratory, Environmental Services Division
TO:	Dodriel Newsome
	ENSULARCH
A	ttached is the data transmittal for the above referenced site. This is a Modified Data
Transmi	ttal; these data are modified and differ from data previously transmitted. If you have
any quest	tions or comments, please contact Dee Simmons at 551-5129.
Attachme	ent
cc: Prima	ary Data File
MODIFI	ED DATA: Data were modified for the following reason(s):
At	The Project Leaders Request
	Ditimo BNA paramoles
0 1	e hours reported in LIME.

United States Environmental Protection Agency

Region 7 Laboratory 25 Funston Road Kansas City, KS 66115

Date: 5/24/2001

Subject: Transmittal of Sample Analysis Results for ASR #: 827

Activity Number: DLN14

Activity Description: Missouri Tie and Timber

From: Michael Thomas, Associate Laboratory Director

Regional Laboratory, Environmental Services Division

To: Dedriel Newsome

ENSV/ARCM

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cc: Analytical Data File

Summary of Activity Information

4/6/2001

Activity Leader: Newsome, Dedriel

Org: ENSV/ARCM

Phone: (913) 551-7049

Activity Number: DLN14

Activity Desc: Missouri Tie and Timber

Location: Bunker

State: Missouri

Type: RCRA

Purpose: Enforcement

Explanation of Codes, Units and Qualifiers used on this report.

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= Field Duplicate FD

Units: Specific units in which results are reported.

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= Milligrams per Kilogram mg/kg mg/L = Milligrams per Liter SU = Standard Units (pH) = Micrograms per Kilogram

ug/kg ug/L

= Micrograms per Liter

Data Qualifiers: Specific codes used in conjunction with data values to provide additional information on the quality of reported results, or used to explain the absence of a specific value.

(Blank) = Values have been reviewed and found acceptable for use.

K = Actual value of the sample is less than the value reported.

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ASR Number: 827

Sample Information Summary

4/6/2001

Activity Desc: Missouri Tie and Timber

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ASR Number: 827

RLAB Approved Analysis Comments

4/6/2001

Analysis

Comments About Results For This Analysis

Semi-Volatile Organic Compounds in Hazardous Waste

Activity Desc: Missouri Tie and Timber

The compounds previously reported in the original transmittal under the "Total Semi-Volatiles of TCLP Compounds in Hazardous" are not reported again in this data set. See the original transmittal for these compounds and associated results.

As requested by the EPA Project Leader, the laboratory was requested to analyze the above samples for the complete list of routine BNA compounds after they had previously been analyzed, and data reported, for the totals of TCLP semivolatiles and TCLP semivolatiles. The laboratory proceeded with the analysis as requested. Although no data were qualified based on holding times, it is possible that the actual concentrations may have been higher than the reported results.

Semi-Volatile Organic Compounds in Soil

Sample 827-102 was not re-extracted with the other samples due to the fact that none of the target compounds exceeded the linearity in the initial analysis. The initial analysis of this sample (and all others) was analyzed in conjunction with a valid calibration for all target compounds. Therefore, the submitted data for this sample contained all target BNA compounds as requested. Also, the compounds previously reported in the original transmittal under the "Total Semi-Volatiles of TCLP Compounds in Solids" are not reported again in this data set. See the original transmittal for these compounds and associated results.

As requested by the EPA Project Leader, the laboratory was requested to analyze the above samples for the complete list of routine BNA compounds after they had previously been analyzed, and data reported, for the totals of TCLP semivolatiles and TCLP semivolatiles. The laboratory proceeded with the analysis as requested. Although no data were qualified based on holding times, it is possible that the actual concentrations may have been higher than the reported results.

Due to matrix interferences and very high native concentrations, MS/MSD recoveries of the phenolic compounds ranged from 0% - 7%. Based on the nature of the samples and the observed MS/MSD results, it is possible that the reported results for the phenolic compounds may be biased low.

TCLP Semi-Volatiles in Hazardous

The laboratory reported 3-methylphenol and 4-methylphenol as an isomer pair. As a result, 3methylphenol is not reported individually.

TCLP Semi-Volatiles in Soil

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Total Semivolatiles of TCLP compounds in Hazardous Waste

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Total Semivolatiles of TCLP compounds in Solids

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ASR Number: 827

Activity Desc: Missouri Tie and Timber

RLAB Approved Sample Analysis Results

Analysis / Analyte	Units	100	101	101-FD	102
Flashpoint of Hazardous Samples			160		
Flashpoint	Deg C	79 L			
oH of Hazardous Sample	·				
	011				
pH	SU	6.7			
Semi-Volatile Organic Compounds in	Hazardous Waste				
Acenaphthene	mg/kg	10670			
Acenaphthylene	mg/kg	64.6			
Anthracene	mg/kg	14710			
Benzo(a)anthracene	mg/kg	3130			
Benzo(a)pyrene	mg/kg	957			
Benzo(b)fluoranthene	mg/kg	1070			
Benzo(g,h,i)perylene	mg/kg	233			
Benzo(k)fluoranthene	mg/kg	983			
Benzoic acid	mg/kg	149 U			
Benzyl alcohol	mg/kg	49.8 U			
bis(2-Chloroethoxy)methane	mg/kg	16.8 U			
bis(2-Chloroethyl)ether	mg/kg	14.9 U			
bis(2-Chloroisopropyl)ether	mg/kg	21.8 U			
bis(2-Ethylhexyl)phthalate	mg/kg	18.8 U			
4-Bromophenyl-phenylether	mg/kg	13.2 U			
Butylbenzylphthalate	mg/kg	14.1 U			
Carbazole	mg/kg	11650			
4-Chloro-3-methylphenol	mg/kg	35.3 U			
4-Chloroaniline	mg/kg	53 U			
2-Chloronaphthalene	mg/kg	25.4 U			
2-Chlorophenol	mg/kg	63.3 U			
4-Chlorophenyl-phenylether	mg/kg	15.3 U			
Chrysene	mg/kg	3770			
Di-n-butylphthalate	mg/kg	17.6 U			
Di-n-octylphthalate	mg/kg	15.9 U			
Dibenz(a,h)anthracene	mg/kg	8.1 U			
Dibenzofuran	mg/kg	8300			
1,2-Dichlorobenzene	mg/kg	33.8 U			
1,3-Dichlorobenzene	mg/kg	36.5 U			
3,3'-Dichlorobenzidine	mg/kg	186 U			
2,4-Dichlorophenol	mg/kg	55.5 U			
Diethylphthalate	mg/kg	11.6 U			
2,4-Dimethylphenol	mg/kg	296 U			
Dimethylphthalate	mg/kg	6.6 U			
4,6-Dinitro-2-methylphenol	mg/kg	63.9 U			
2,4-Dinitrophenol	mg/kg	112 U			
2,6-Dinitrotoluene	mg/kg	33.9 U			
Fluoranthene	mg/kg	22330			
Fluorene	mg/kg	14240			
Hexachlorocyclopentadiene					
	mg/kg	28.5 U			
Indeno(1,2,3-cd)pyrene Isophorone	mg/kg	264			
	mg/kg	27.6 U			
2-Methylnaphthalene	mg/kg	2080			

ASR Number: 827

Activity Desc: Missouri Tie and Timber

RLAB Approved Sample Analysis Results

Analysis / Analyte	Units	100	101	101-FD	102
2-Nitroaniline	mg/kg	29.9 U			
3-Nitroaniline	mg/kg	71.9 U			
4-Nitroaniline	mg/kg	66.3 U			
2-Nitrophenol	mg/kg	50.4 U			
4-Nitrophenol	mg/kg	61.1 U			
N-nitroso-di-n-propylamine	mg/kg	24.8 U			
N-nitrosodiphenylamine	mg/kg	13.1 U			
Phenanthrene	mg/kg	53280			
Phenol	mg/kg	57.6 U			
Pyrene	mg/kg	15690			
1,2,4-Trichlorobenzene	mg/kg	24.5 U			
CLP Metals in Haz. Waste					
Arsenic	mg/L	0.025 U			
Barium	mg/L	0.08			
Cadmium	mg/L	0.005 U			
Chromium	mg/L	0.005 U			
Lead	mg/L	0.025 U			
Selenium	mg/L	0.05 U			
Silver	mg/L	0.005 U			
CLP Semi-Volatiles in Hazardous	i.				
1,4-Dichlorobenzene	mg/L	0.00064 U			
2,4-Dinitrotoluene	mg/L	0.00073 U			
Hexachlorobenzene	mg/L	0.0005 U			
Hexachlorobutadiene	mg/L	0.00059 U			
Hexachloroethane	mg/L	0.00071 U			
2-Methylphenol	mg/L	0.014 U			
4-Methylphenol	mg/L	0.18			
Nitrobenzene	mg/L	0.00075 U			
Pentachlorophenol	mg/L	0.0012 U			
Pyridine	mg/L	0.0021 U			
2,4,5-Trichlorophenol	mg/L	0.0017 U			
2,4,6-Trichlorophenol	mg/L	0.0017 U			
Total Metals of TCLP in Hazardou	s Samples by ICAP				
Arsenic	mg/kg	125 U			
Barium	mg/kg	50 U			
Cadmium	mg/kg	25 U			
Chromium	mg/kg	25 U			
Lead	mg/kg	125 U			
Selenium	mg/kg	250 U			
Silver	mg/kg	25 U			
Total Semivolatiles of TCLP comp		Waste		8	
Pyridine	mg/kg	198 U			
Semi-Volatile Organic Compound					
Acenaphthene	ug/kg		117000	86500	7.
Acenaphthylene	ug/kg		3020		
Anthracene	ug/kg		127000	99200	4.
Benzo(a)anthracene	ug/kg		50200	38400	3.
Benzo(a)pyrene	ug/kg		2940		



Activity Desc: Missouri Tie and Timber

ASR Number: 827

RLAB Approved Sample Analysis Results

Benzo(b)fluoranthene Benzo(g,h,i)perylene Benzoic acid Benzoic	4720 U	4720 U	
Benzo(k)fluoranthene ug/kg Benzoic acid ug/kg Benzoic acid ug/kg Benzyl alcohol ug/kg bis(2-Chloroethoxy)methane ug/kg bis(2-Chloroisopropyl)ether ug/kg bis(2-Ethylhexyl)phthalate ug/kg 4-Bromophenyl-phenylether ug/kg Butylbenzylphthalate ug/kg 4-Chloro-3-methylphenol ug/kg 4-Chloro-3-methylphenol ug/kg 4-Chloro-anpthalane ug/kg 2-Chlorophenol ug/kg 4-Chlorophenyl-phenylether ug/kg Chrysene ug/kg Di-n-butylphthalate ug/kg Di-n-butylphthalate ug/kg Di-n-butylphthalate ug/kg Di-n-butylphthalate ug/kg Di-n-botylphthalate ug/kg Di-n-butylphthalate ug/kg 1,2-Dichlorobenzene ug/kg 1,2-Dichlorobenzene ug/kg 1,2-Dichlorobenzene ug/kg 2,4-Dimetrylphenol ug/kg 2,4-Dimetrylphenol ug/kg 2,4-Dimetrylphenol ug/kg Dimethylphthalate ug/kg 2,4-Dimethylphenol ug/kg Pluoranthene ug/kg Fluoranthene ug/kg Fluoranthene ug/kg Fluoranthene ug/kg Indeno(1,2,3-cd)pyrene ug/kg Naphthalene ug/kg	0070 11	4120 U	8.1 U
Benzoic acid ug/kg Benzyl alcohol ug/kg bis(2-Chloroethyl)ether ug/kg bis(2-Chlorospyl)ether ug/kg bis(2-Chlorospyl)ether ug/kg bis(2-Ethylhexyl)phthalate ug/kg 4-Bromophenyl-phenylether ug/kg Butylbenzylphthalate ug/kg 4-Chloro-3-methylphenol ug/kg 4-Chloro-3-methylphenol ug/kg 4-Chloro-3-methylphenol ug/kg 2-Chlorophenol ug/kg 2-Chlorophenol ug/kg 4-Chlorophenol ug/kg bi-n-otylphthalate ug/kg Di-n-butylphthalate ug/kg Di-n-butylphthalate ug/kg Di-n-butylphthalate ug/kg Di-n-otylphthalate ug/kg Dibenz(a,h)anthracene ug/kg Dibenzofuran ug/kg 1,3-Dichlorobenzene ug/kg 1,3-Dichlorobenzene ug/kg 1,3-Dichlorobenzidine ug/kg 2,4-Dimtrophenol ug/kg Dimethylphthalate ug/kg 2,4-Dimethylphenol ug/kg Dimethylphthalate ug/kg 2,4-Dimitro-2-methylphenol ug/kg Dimethylphthalate ug/kg 4,6-Dinitro-2-methylphenol ug/kg Fluorane ug/kg Fluoranthene ug/kg Fluoranthene ug/kg Fluoranthene ug/kg Fluoranthene ug/kg Responsoroe ug/kg Respons	3870 U	3870 U	6.7 U
Benzyl alcohol bis(2-Chloroethoxy)methane bis(2-Chloroethoxy)methane bis(2-Chloroethyl)ether bis(2-Chloroisopropyl)ether bis(2-Ethylhexyl)phthalate Ug/kg bis(2-Ethylhexyl)phthalate Ug/kg Ug/kg 4-Ethylhexyl)phthalate Ug/kg	3940 U	3940 U	6.8 U
bis(2-Chloroethoxy)methane bis(2-Chloroethyl)ether bis(2-Chloroisopropyl)ether bis(2-Ethylhexyl)phthalate d-Bromophenyl-phenylether bis(2-Ethylhexyl)phthalate ug/kg bis(2-Ethylhexyl)phthalate ug/kg 4-Bromophenyl-phenylether ug/kg Butylbenzylphthalate ug/kg 4-Chloro-3-methylphenol ug/kg 4-Chloro-3-methylphenol ug/kg 2-Chloronaphthalene ug/kg 2-Chlorophenol ug/kg 4-Chlorophenyl-phenylether ug/kg Chrysene ug/kg Di-n-butylphthalate Dibenz(a,h)anthracene Ug/kg Dibenzofuran ug/kg 1,3-Dichlorobenzene ug/kg 3,3'-Dichlorobenzene ug/kg 3,3'-Dichlorobenzene ug/kg 2,4-Dimethylphthalate ug/kg 2,4-Dimethylphenol ug/kg 4,6-Dinitro-2-methylphenol ug/kg 1,2-Dichlorobene ug/kg 1,3-Dichlorobene ug/kg 1,3-Dichlorobene ug/kg 1,4-Dinterophenol ug/kg 1,4-Dinteroylphenol ug/kg 1,4-Dinteroylphenol ug/kg 1,4-Dinteroylphenol ug/kg 1,4-Dinteroylenene ug/kg 1,4-Dintrophenol ug/kg 2,4-Dintrophenol ug/kg 3,3'-Dichlorophenol ug/kg 2,4-Dintrophenol ug/kg 2,4-Dintrophenol ug/kg 3,3'-Dichlorophenol ug/kg 4,6-Dinitro-2-methylphenol ug/kg 4,6-Dinitro-2-methylphenol ug/kg 4,6-Dinitro-2-methylphenol ug/kg 4,6-Dinitro-2-methylphenol ug/kg 4,6-Dinitro-2-methylphenol ug/kg 4,6-Dinitro-2-methylphenol ug/kg 4,6-Dinitro-1-methylphenol ug/kg 4,6-Dinitro-2-methylphenol ug/kg 4,6-Dinitro-1-methylphenol ug/kg	76500 U	76500 U	132 U
bis(2-Chloroethyl)ether bis(2-Ethylhexyl)phthalate bis(2-Ethylhexyl)phthalate ug/kg bis(2-Ethylhexyl)phthalate ug/kg 4-Bromophenyl-phenylether Butylbenzylphthalate ug/kg Carbazole ug/kg 4-Chloro-3-methylphenol ug/kg 2-Chloronaphthalene ug/kg 2-Chlorophenol ug/kg 2-Chlorophenol ug/kg 0-Chlorophenol ug/kg 0-Chysene ug/kg Di-n-butylphthalate ug/kg Di-n-butylphthalate ug/kg Di-n-ottylphthalate ug/kg Dibenzofuran ug/kg 1,2-Dichlorobenzene ug/kg 3,3'-Dichlorobenzene ug/kg 2,4-Dichlorophenol ug/kg 2,4-Dimethylphthalate ug/kg 2,4-Dimethylphthalate ug/kg 2,4-Dimethylphthalate ug/kg 2,4-Dimethylphthalate ug/kg 2,4-Dinitro-2-methylphenol ug/kg 2,4-Dinitro-2-methylphenol ug/kg 1,2-G-Dinitrotoluene ug/kg 1,2-G-Dinitrotoluene ug/kg 1,3-G-Dinitrotoluene ug/kg 2,4-Dinitrophenol ug/kg 3,3'-Dichlorophenol ug/kg 2,4-Dinitrophenol ug/kg 2,4-Dinitrophenol ug/kg 2,4-Dinitrophenol ug/kg 2,4-Dinitrophenol ug/kg 3,3'-Dichlorophenol ug/kg 2,4-Dinitrophenol ug/kg 2,4-Dinitrophenol ug/kg 3,3'-Dichlorophenol ug/kg 4,6-Dinitrotoluene ug/kg 4,6-Dinitrotoluene ug/kg 4,6-Dinitrotoluene ug/kg 4,6-Dinitrotoluene ug/kg 4,6-Dinitrotoluene ug/kg 2,4-Dinitrophenol ug/kg 3,3'-Dichlorophenol ug/kg 4,6-Dinitrotoluene ug/kg	25700 U	25700 U	44.3 U
bis(2-Chloroisopropyl)ether bis(2-Ethylhexyl)phthalate 4-Bromophenyl-phenylether Butylbenzylphthalate 4-Chloro-3-methylphenol 4-Chloro-3-methylphenol 4-Chloroanilline 2-Chloronaphthalene 2-Chlorophenol 4-Chlorophenol	8660 U	8660 U	14.9 U
bis(2-Ethylhexyl)phthalate 4-Bromophenyl-phenylether Butylbenzylphthalate Carbazole 4-Chloro-3-methylphenol 4-Chloroaniline Ug/kg 4-Chloroaniline Ug/kg 2-Chloroaphthalene Ug/kg 2-Chlorophenol Ug/kg 4-Chlorophenol Ug/kg 4-Chlorophenol Ug/kg 4-Chlorophenyl-phenylether Ug/kg Chrysene Ug/kg Di-n-otylphthalate Ug/kg Di-n-otylphthalate Ug/kg Dibenz(a,h)anthracene Ug/kg 1,2-Dichlorobenzene Ug/kg 1,3-Dichlorobenzene Ug/kg 1,3-Dichlorobenzidine Ug/kg 2,4-Dimethylphthalate Ug/kg 2,4-Dimethylphenol Ug/kg Dimethylphthalate Ug/kg	7650 U	7650 U	13.2 U
4-Bromophenyl-phenylether ug/kg Butylbenzylphthalate ug/kg 4-Chloro-3-methylphenol ug/kg 4-Chloro-3-methylphenol ug/kg 2-Chloronaphthalene ug/kg 2-Chlorophenol ug/kg 4-Chlorophenyl-phenylether ug/kg Chrysene ug/kg Di-n-butylphthalate ug/kg Di-n-octylphthalate ug/kg Di-n-octylphthalate ug/kg Dibenz(a, h)anthracene ug/kg Dibenzofuran ug/kg 1,2-Dichlorobenzene ug/kg 3,3'-Dichlorobenzene ug/kg 2,4-Dichlorobenzidine ug/kg Diethylphthalate ug/kg 2,4-Dimethylphenol ug/kg Dimethylphthalate ug/kg 2,4-Dimethylphenol ug/kg Fluoranthene ug/kg 4,6-Dinitro-2-methylphenol ug/kg Fluoranthene ug/kg Fluoranthene ug/kg Hexachlorocyclopentadiene ug/kg Isophorone ug/kg 1-Mexachlorocyclopentadiene ug/kg 1-Mexachlorocyclopentadiene ug/kg 1-Mexachlorocyclopentadiene ug/kg 2-Methylnaphthalene ug/kg 2-Methylnaphthalene ug/kg 2-Methylnaphthalene ug/kg 3-Nitroaniline ug/kg 4-Nitroaniline ug/kg 4-Nitroaniline ug/kg 4-Nitroaniline ug/kg 4-Nitroaniline ug/kg 4-Nitroaniline ug/kg 4-Nitrophenol ug/kg	11200 U	11200 U	19.3 U
Butylbenzylphthalate ug/kg Carbazole ug/kg 4-Chloro-3-methylphenol ug/kg 4-Chloroaphthalene ug/kg 2-Chloronaphthalene ug/kg 2-Chlorophenol ug/kg 4-Chlorophenol ug/kg 4-Chlorophenol ug/kg 5-Chlorophenyl-phenylether ug/kg 6-Chrysene ug/kg 6-In-butylphthalate ug/kg Di-n-butylphthalate ug/kg Dibenz(a,h)anthracene ug/kg Dibenzofuran ug/kg 1,2-Dichlorobenzene ug/kg 1,3-Dichlorobenzidine ug/kg 2,4-Dichlorophenol ug/kg Diethylphthalate ug/kg 2,4-Dimethylphenol ug/kg 1,6-Dinitro-2-methylphenol ug/kg 2,4-Dinitrophenol ug/kg Fluoranthene ug/kg Fluorene ug/kg Fluorene ug/kg Fluorene ug/kg Fluorene ug/kg Fluorene ug/kg Span-Span-Span-Span-Span-Span-Span-Span-	9660 U	9660 U	16.7 U
Butylbenzylphthalate ug/kg Carbazole ug/kg 4-Chloro-3-methylphenol ug/kg 4-Chloroaniline ug/kg 2-Chloronaphthalene ug/kg 2-Chlorophenol ug/kg 4-Chlorophenol ug/kg 4-Chlorophenyl-phenylether ug/kg 6-Chysene ug/kg Di-n-butylphthalate ug/kg Di-n-butylphthalate ug/kg Dibenz(a,h)anthracene ug/kg Dibenzofuran ug/kg 1,2-Dichlorobenzene ug/kg 1,3-Dichlorobenzene ug/kg 3,3-Dichlorobenzidine ug/kg 2,4-Dimethylphthalate ug/kg Diethylphthalate ug/kg 2,4-Dimethylphenol ug/kg Chybentylphthalate ug/kg Elientylphthalate ug/kg Elientylphthalate ug/kg Elientylphthalate ug/kg Elientylphthalate ug/kg Elientylphthalate ug/kg Eliorophenol ug/kg Eliorophenol ug/kg Eliorophenol ug/kg Eliorophenol ug/kg Elioranthene ug/kg Elioranthene ug/kg Elioranthene ug/kg Elioranthene ug/kg Indeno(1,2,3-cd)pyrene ug/kg Indeno(1,2,3-cd)pyrene ug/kg S-Methylnaphthalene ug/kg Aphthalene ug/kg S-Nitroaniline ug/kg S-Nitroaniline ug/kg S-Nitroaniline ug/kg S-Nitroaniline ug/kg	6800 U	6800 U	11.7 L
Carbazole ug/kg 4-Chloro-3-methylphenol ug/kg 4-Chloro-3-methylphenol ug/kg 2-Chloronaphthalene ug/kg 2-Chlorophenol ug/kg 2-Chlorophenol ug/kg 4-Chlorophenyl-phenylether ug/kg Chrysene ug/kg Di-n-butylphthalate ug/kg Di-n-ottylphthalate ug/kg Di-n-ottylphthalate ug/kg Dibenzofuran ug/kg Dibenzofuran ug/kg 1,2-Dichlorobenzene ug/kg 1,3-Dichlorobenzene ug/kg 3,3'-Dichlorobenzidine ug/kg 2,4-Dichlorobenzidine ug/kg 2,4-Dimethylphthalate ug/kg 2,4-Dimethylphenol ug/kg 2,4-Dimitro-2-methylphenol ug/kg 2,4-Dinitro-2-methylphenol ug/kg 1,6-Dinitrotoluene ug/kg Fluorene ug/kg Fluorene ug/kg Indeno(1,2,3-cd)pyrene ug/kg 1-Nitroaniline ug/kg 3-Nitroaniline ug/kg 4-Nitroaniline ug/kg 3-Nitroaniline ug/kg 4-Nitroaniline ug/kg	7270 U	7270 U	12.5 L
4-Chloro-3-methylphenol ug/kg 2-Chloronaphthalene ug/kg 2-Chlorophenol ug/kg 4-Chlorophenyl-phenylether ug/kg 4-Chlorophenyl-phenylether ug/kg Chrysene ug/kg Di-n-butylphthalate ug/kg Di-n-octylphthalate ug/kg Dibenz(a,h)anthracene ug/kg Dibenzofuran ug/kg T,2-Dichlorobenzene ug/kg 3,3'-Dichlorobenzene ug/kg 2,4-Dichlorophenol ug/kg Diethylphthalate ug/kg 2,4-Dimethylphenol ug/kg 2,4-Dimitro-2-methylphenol ug/kg 2,6-Dinitrotoluene ug/kg Fluorene ug/kg Hexachlorocyclopentadiene ug/kg Indeno(1,2,3-cd)pyrene ug/kg 2-Methylnaphthalene ug/kg Naphthalene ug/kg 3-Nitroaniline ug/kg 2-Nitrophenol ug/kg 2-Nitrophenol ug/kg 2-Nitrophenol ug/kg 2-Nitrophenol ug/kg	86400	60700	78.7 L
4-Chloroaniline ug/kg 2-Chloronaphthalene ug/kg 2-Chlorophenol ug/kg 4-Chlorophenyl-phenylether ug/kg Chrysene ug/kg Di-n-butylphthalate ug/kg Di-n-octylphthalate ug/kg Dibenz(a,h)anthracene ug/kg Dibenzofuran ug/kg 1,2-Dichlorobenzene ug/kg 1,3-Dichlorobenzene ug/kg 3,3'-Dichlorobenzidine ug/kg 2,4-Dichlorophenol ug/kg Dientylphthalate ug/kg 2,4-Dimethylphenol ug/kg 2,4-Dimitro-2-methylphenol ug/kg 2,6-Dinitrotoluene ug/kg Fluorene ug/kg Hexachlorocyclopentadiene ug/kg Indeno(1,2,3-cd)pyrene ug/kg 1-Chlorophenol ug/kg 2-Methylnaphthalene ug/kg 3-Nitroaniline ug/kg 3-Nitroaniline ug/kg 4-Nitrophenol ug/kg 3-Nitroaniline ug/kg 4-Nitrophenol ug/kg 3-Nitrophenol ug/kg 4-Nitrophenol ug/kg	18200 U	18200 U	31.3 L
2-Chloronaphthalene ug/kg 2-Chlorophenol ug/kg 4-Chlorophenyl-phenylether ug/kg Chrysene ug/kg Di-n-butylphthalate ug/kg Di-n-octylphthalate ug/kg Di-n-octylphthalate ug/kg Dibenz(a,h)anthracene ug/kg Dibenzofuran ug/kg 1,2-Dichlorobenzene ug/kg 1,3-Dichlorobenzene ug/kg 3,3'-Dichlorobenzidine ug/kg 2,4-Dichlorophenol ug/kg 2,4-Dimethylphthalate ug/kg 2,4-Dimethylphthalate ug/kg 4,6-Dinitro-2-methylphenol ug/kg 4,6-Dinitroblene ug/kg Fluorene ug/kg Fluorene ug/kg Hexachlorocyclopentadiene ug/kg Indeno(1,2,3-cd)pyrene ug/kg Isophorone ug/kg 2-Methylnaphthalene ug/kg Naphthalene ug/kg 3-Nitroaniline ug/kg 4-Nitrophenol ug/kg 2-Nitrophenol ug/kg 3-Nitroaniline ug/kg 4-Nitrophenol ug/kg	27300 U	27300 U	47.1 L
2-Chlorophenol ug/kg 4-Chlorophenyl-phenylether ug/kg Chrysene ug/kg Di-n-butylphthalate ug/kg Di-n-octylphthalate ug/kg Dibenz(a,h)anthracene ug/kg Dibenzofuran ug/kg 1,2-Dichlorobenzene ug/kg 1,3-Dichlorobenzene ug/kg 3,3'-Dichlorobenzidine ug/kg 2,4-Dichlorophenol ug/kg Diethylphthalate ug/kg 2,4-Dimethylphenol ug/kg Dimethylphthalate ug/kg 2,4-Dinitro-2-methylphenol ug/kg 2,4-Dinitrophenol ug/kg Elioranthene ug/kg Fluoranthene ug/kg Fluoranthene ug/kg Indeno(1,2,3-cd)pyrene ug/kg 2-Methylnaphthalene ug/kg Naphthalene ug/kg 3-Nitroaniline ug/kg 4-Nitroaniline ug/kg 2-Nitrophenol ug/kg 3-Nitroaniline ug/kg 4-Nitroaniline ug/kg 2-Nitrophenol ug/kg 2-Nitrophenol ug/kg 2-Nitrophenol ug/kg	13100 U	13100 U	22.5 \
4-Chlorophenyl-phenylether ug/kg Chrysene ug/kg Di-n-butylphthalate ug/kg Di-n-octylphthalate ug/kg Dibenz(a,h)anthracene ug/kg Dibenzofuran ug/kg 1,2-Dichlorobenzene ug/kg 1,3-Dichlorobenzene ug/kg 3,3'-Dichlorobenzidine ug/kg 2,4-Dichlorophenol ug/kg Diethylphthalate ug/kg 2,4-Dimethylphenol ug/kg Dimethylphthalate ug/kg 4,6-Dinitro-2-methylphenol ug/kg 2,6-Dinitroblenel ug/kg Fluorene ug/kg Hexachlorocyclopentadiene ug/kg Indeno(1,2,3-cd)pyrene ug/kg 1-Methylnaphthalene ug/kg 2-Methylnaphthalene ug/kg 3-Nitroaniline ug/kg 4-Nitroaniline ug/kg 2-Nitrophenol ug/kg 2-Nitrophenol ug/kg 3-Nitroaniline ug/kg 4-Nitrophenol ug/kg 2-Nitrophenol ug/kg 2-Nitrophenol ug/kg	32600 U	32600 U	56.3 L
Chrysene ug/kg Di-n-butylphthalate ug/kg Di-n-octylphthalate ug/kg Dibenzofuran ug/kg Dibenzofuran ug/kg 1,2-Dichlorobenzene ug/kg 1,3-Dichlorobenzene ug/kg 3,3'-Dichlorophenol ug/kg Diethylphthalate ug/kg 2,4-Dimethylphthalate ug/kg 2,4-Dimethylphthalate ug/kg 4,6-Dinitro-2-methylphenol ug/kg 2,6-Dinitrotoluene ug/kg Fluoranthene ug/kg Hexachlorocyclopentadiene ug/kg Indeno(1,2,3-cd)pyrene ug/kg 2-Methylnaphthalene ug/kg 2-Nitroaniline ug/kg 3-Nitroaniline ug/kg 3-Nitroaniline ug/kg 4-Nitrophenol ug/kg 3-Nitroaniline ug/kg 4-Nitrophenol ug/kg 3-Nitrophenol ug/kg 4-Nitrophenol ug/kg 4-Nitrophenol ug/kg 4-Nitrophenol ug/kg	7890 U	7890 U	13.6
Di-n-butylphthalate Di-n-octylphthalate Dibenz(a,h)anthracene Dibenzofuran Ug/kg Dibenzofuran Ug/kg 1,2-Dichlorobenzene Ug/kg 1,3-Dichlorobenzene Ug/kg 3,3'-Dichlorobenzidine Ug/kg 2,4-Dichlorophenol Ug/kg 2,4-Dimethylphthalate Ug/kg 2,4-Dimethylphenol Ug/kg Dimethylphthalate Ug/kg 4,6-Dinitro-2-methylphenol Ug/kg 2,4-Dinitrophenol Ug/kg 1,2-Dinitrotoluene Ug/kg 1,2-Ditroniline Ug/kg 2-Methylnaphthalene Ug/kg 3-Nitroaniline Ug/kg 4-Nitroaniline Ug/kg 2-Nitrophenol Ug/kg	70500	62200	4.3
Di-n-octylphthalate Dibenz(a,h)anthracene Dibenzofuran Ug/kg Dibenzofuran Ug/kg 1,2-Dichlorobenzene Ug/kg 1,3-Dichlorobenzene Ug/kg 3,3'-Dichlorobenzidine Ug/kg 2,4-Dichlorophenol Ug/kg Diethylphthalate Ug/kg 2,4-Dimethylphenol Ug/kg Dimethylphthalate Ug/kg 4,6-Dinitro-2-methylphenol Ug/kg 2,4-Dinitrophenol Ug/kg Pluoranthene Ug/kg Fluoranthene Ug/kg Hexachlorocyclopentadiene Ug/kg Indeno(1,2,3-cd)pyrene Ug/kg S-Methylnaphthalene Ug/kg Vag Vag Vag Vag Vag Vag Vag Vag Vag Va	9050 U	9050 U	15.6
Dibenz(a,h)anthracene Dibenzofuran Ug/kg 1,2-Dichlorobenzene Ug/kg 1,3-Dichlorobenzene Ug/kg 3,3'-Dichlorophenol Ug/kg 2,4-Dichlorophenol Ug/kg 2,4-Dimethylphthalate Ug/kg 2,4-Dimethylphthalate Ug/kg 2,4-Dinitro-2-methylphenol Ug/kg 2,4-Dinitrophenol Ug/kg 2,6-Dinitrotoluene Ug/kg Fluoranthene Ug/kg Hexachlorocyclopentadiene Ug/kg Indeno(1,2,3-cd)pyrene Ug/kg 2-Methylnaphthalene Ug/kg 2-Nitroaniline Ug/kg 2-Nitroaniline Ug/kg 2-Nitrophenol Ug/kg 2-Nitrophenol Ug/kg	8200 U	8200 U	14.1
Dibenzofuran ug/kg 1,2-Dichlorobenzene ug/kg 1,3-Dichlorobenzene ug/kg 3,3'-Dichlorobenzidine ug/kg 2,4-Dichlorophenol ug/kg Diethylphthalate ug/kg 2,4-Dimethylphenol ug/kg Dimethylphthalate ug/kg 4,6-Dinitro-2-methylphenol ug/kg 2,4-Dinitrophenol ug/kg 2,4-Dinitrophenol ug/kg 1,4-Dinitrotoluene ug/kg 1,6-Dinitrotoluene ug/kg Fluoranthene ug/kg Fluorene ug/kg Hexachlorocyclopentadiene ug/kg Indeno(1,2,3-cd)pyrene ug/kg Isophorone ug/kg 2-Methylnaphthalene ug/kg Naphthalene ug/kg 3-Nitroaniline ug/kg 4-Nitroaniline ug/kg 2-Nitrophenol ug/kg	4180 U	4180 U	7.2
1,2-Dichlorobenzene ug/kg 1,3-Dichlorobenzene ug/kg 3,3'-Dichlorobenzidine ug/kg 2,4-Dichlorophenol ug/kg Diethylphthalate ug/kg 2,4-Dimethylphenol ug/kg Dimethylphthalate ug/kg 4,6-Dinitro-2-methylphenol ug/kg 2,4-Dinitrophenol ug/kg 2,4-Dinitrophenol ug/kg 2,6-Dinitrotoluene ug/kg Fluoranthene ug/kg Hexachlorocyclopentadiene ug/kg Indeno(1,2,3-cd)pyrene ug/kg Isophorone ug/kg Naphthalene ug/kg Naphthalene ug/kg 3-Nitroaniline ug/kg 4-Nitroaniline ug/kg 2-Nitrophenol ug/kg 2-Nitrophenol ug/kg	64300	37100	22.4
1,3-Dichlorobenzene ug/kg 3,3'-Dichlorobenzidine ug/kg 2,4-Dichlorophenol ug/kg Diethylphthalate ug/kg 2,4-Dimethylphenol ug/kg Dimethylphthalate ug/kg 4,6-Dinitro-2-methylphenol ug/kg 2,4-Dinitrophenol ug/kg 2,4-Dinitrophenol ug/kg 2,6-Dinitrotoluene ug/kg Fluoranthene ug/kg Fluorene ug/kg Hexachlorocyclopentadiene ug/kg Indeno(1,2,3-cd)pyrene ug/kg Isophorone ug/kg Naphthalene ug/kg Naphthalene ug/kg 3-Nitroaniline ug/kg 4-Nitroaniline ug/kg 2-Nitrophenol ug/kg	17400 U	17400 U	30
3,3'-Dichlorobenzidine ug/kg 2,4-Dichlorophenol ug/kg Diethylphthalate ug/kg 2,4-Dimethylphenol ug/kg Dimethylphthalate ug/kg 4,6-Dinitro-2-methylphenol ug/kg 2,4-Dinitrophenol ug/kg 2,4-Dinitrophenol ug/kg 2,6-Dinitrotoluene ug/kg Fluoranthene ug/kg Fluoranthene ug/kg Hexachlorocyclopentadiene ug/kg Indeno(1,2,3-cd)pyrene ug/kg Isophorone ug/kg 2-Methylnaphthalene ug/kg Naphthalene ug/kg 3-Nitroaniline ug/kg 4-Nitroaniline ug/kg 2-Nitrophenol ug/kg	18800 U	18800 U	32.4
2,4-Dichlorophenol ug/kg Diethylphthalate ug/kg 2,4-Dimethylphenol ug/kg Dimethylphthalate ug/kg 4,6-Dinitro-2-methylphenol ug/kg 2,4-Dinitrophenol ug/kg 2,4-Dinitrophenol ug/kg 2,6-Dinitrotoluene ug/kg Fluoranthene ug/kg Fluorene ug/kg Hexachlorocyclopentadiene ug/kg Indeno(1,2,3-cd)pyrene ug/kg Isophorone ug/kg 2-Methylnaphthalene ug/kg Naphthalene ug/kg 2-Nitroaniline ug/kg 3-Nitroaniline ug/kg 4-Nitroaniline ug/kg 2-Nitrophenol ug/kg	95900 U	95900 U	165
Diethylphthalate ug/kg 2,4-Dimethylphenol ug/kg Dimethylphthalate ug/kg 4,6-Dinitro-2-methylphenol ug/kg 2,4-Dinitrophenol ug/kg 2,4-Dinitrophenol ug/kg 2,6-Dinitrotoluene ug/kg Fluoranthene ug/kg Fluorene ug/kg Hexachlorocyclopentadiene ug/kg Indeno(1,2,3-cd)pyrene ug/kg Isophorone ug/kg 2-Methylnaphthalene ug/kg Naphthalene ug/kg 3-Nitroaniline ug/kg 4-Nitroaniline ug/kg 2-Nitrophenol ug/kg	28600 U	28600 U	49.3
2,4-Dimethylphenol ug/kg Dimethylphthalate ug/kg 4,6-Dinitro-2-methylphenol ug/kg 2,4-Dinitrophenol ug/kg 2,4-Dinitrophenol ug/kg Fluoranthene ug/kg Fluorene ug/kg Hexachlorocyclopentadiene ug/kg Indeno(1,2,3-cd)pyrene ug/kg Isophorone ug/kg 2-Methylnaphthalene ug/kg Naphthalene ug/kg 3-Nitroaniline ug/kg 4-Nitroaniline ug/kg 2-Nitrophenol ug/kg	5950 U	5950 U	10.3
Dimethylphthalate ug/kg 4,6-Dinitro-2-methylphenol ug/kg 2,4-Dinitrophenol ug/kg 2,6-Dinitrotoluene ug/kg Fluoranthene ug/kg Fluorene ug/kg Hexachlorocyclopentadiene ug/kg Indeno(1,2,3-cd)pyrene ug/kg Isophorone ug/kg 2-Methylnaphthalene ug/kg Naphthalene ug/kg 3-Nitroaniline ug/kg 4-Nitroaniline ug/kg 2-Nitrophenol ug/kg	152000 U	152000 U	263
4,6-Dinitro-2-methylphenolug/kg2,4-Dinitrophenolug/kg2,6-Dinitrotolueneug/kgFluorantheneug/kgFluoreneug/kgHexachlorocyclopentadieneug/kgIndeno(1,2,3-cd)pyreneug/kgIsophoroneug/kg2-Methylnaphthaleneug/kgNaphthaleneug/kg2-Nitroanilineug/kg3-Nitroanilineug/kg4-Nitroanilineug/kg2-Nitrophenolug/kg	3400 U	3400 U	5.9
2,4-Dinitrophenolug/kg2,6-Dinitrotolueneug/kgFluorantheneug/kgFluoreneug/kgHexachlorocyclopentadieneug/kgIndeno(1,2,3-cd)pyreneug/kgIsophoroneug/kg2-Methylnaphthaleneug/kgNaphthaleneug/kg2-Nitroanilineug/kg3-Nitroanilineug/kg4-Nitroanilineug/kg2-Nitrophenolug/kg	32900 U	32900 U	56.8
2,6-Dinitrotolueneug/kgFluorantheneug/kgFluoreneug/kgHexachlorocyclopentadieneug/kgIndeno(1,2,3-cd)pyreneug/kgIsophoroneug/kg2-Methylnaphthaleneug/kgNaphthaleneug/kg2-Nitroanilineug/kg3-Nitroanilineug/kg4-Nitroanilineug/kg2-Nitrophenolug/kg	57700 U	57700 U	99.5
Fluoranthene ug/kg Fluorene ug/kg Hexachlorocyclopentadiene ug/kg Indeno(1,2,3-cd)pyrene ug/kg Isophorone ug/kg 2-Methylnaphthalene ug/kg Naphthalene ug/kg 2-Nitroaniline ug/kg 3-Nitroaniline ug/kg 4-Nitroaniline ug/kg 2-Nitrophenol ug/kg	17500 U	17500 U	30.1
Fluorene ug/kg Hexachlorocyclopentadiene ug/kg Indeno(1,2,3-cd)pyrene ug/kg Isophorone ug/kg 2-Methylnaphthalene ug/kg Naphthalene ug/kg 2-Nitroaniline ug/kg 3-Nitroaniline ug/kg 4-Nitroaniline ug/kg 2-Nitrophenol ug/kg	363000	297000	106
Hexachlorocyclopentadiene ug/kg Indeno(1,2,3-cd)pyrene ug/kg Isophorone ug/kg 2-Methylnaphthalene ug/kg Naphthalene ug/kg 2-Nitroaniline ug/kg 3-Nitroaniline ug/kg 4-Nitroaniline ug/kg 2-Nitroaniline ug/kg	159000	120000	6.5
Indeno(1,2,3-cd)pyrene ug/kg Isophorone ug/kg 2-Methylnaphthalene ug/kg Naphthalene ug/kg 2-Nitroaniline ug/kg 3-Nitroaniline ug/kg 4-Nitroaniline ug/kg 2-Nitroaniline ug/kg	14700 U	14700 U	25.3
Isophorone ug/kg 2-Methylnaphthalene ug/kg Naphthalene ug/kg 2-Nitroaniline ug/kg 3-Nitroaniline ug/kg 4-Nitroaniline ug/kg 2-Nitrophenol ug/kg	2550 U	2550 U	4.4
2-Methylnaphthalene ug/kg Naphthalene ug/kg 2-Nitroaniline ug/kg 3-Nitroaniline ug/kg 4-Nitroaniline ug/kg 2-Nitrophenol ug/kg	14200 U	14200 U	24.5
Naphthalene ug/kg 2-Nitroaniline ug/kg 3-Nitroaniline ug/kg 4-Nitroaniline ug/kg 2-Nitrophenol ug/kg	13400 U	13400 U	23.1
2-Nitroaniline ug/kg 3-Nitroaniline ug/kg 4-Nitroaniline ug/kg 2-Nitrophenol ug/kg	3250 U	3250 U	5.6
3-Nitroaniline ug/kg 4-Nitroaniline ug/kg 2-Nitrophenol ug/kg	15400 U	15400 U	26.5
4-Nitroaniline ug/kg 2-Nitrophenol ug/kg	37000 U	37000 U	63.9
2-Nitrophenol ug/kg	34200 U	34200 U	58.9
	26000 U	26000 U	44.8
4 Nitrophonol		31500 U	54.3
4-Nitrophenol ug/kg	31500 U		
N-nitroso-di-n-propylamine ug/kg	12800 U	12800 U	22
N-nitrosodiphenylamine ug/kg	6730 U	6730 U	11.6
Phenanthrene ug/kg	648000	486000	195
Phenol ug/kg	29700 U	29700 U	51.2
Pyrene ug/kg 1,2,4-Trichlorobenzene ug/kg	277000 12600 U	233000 12600 U	75 21.7

ASR Number: 827

RLAB Approved Sample Analysis Results

4/6/2001

Activity Desc: Missouri Tie and Timber

100-_ Analysis / Analyte Units 101-101-FD 102-__ TCLP Metals in Soil Arsenic mg/L 5.0 K 5.0 K Barium mg/L 100 K 100 K Cadmium mg/L 1.0 K 1.0 K Chromium mg/L 5.0 K 5.0 K Lead mg/L 5.0 K 5.0 K Selenium mg/L 1.0 K 1.0 K Silver mg/L 5.0 K 5.0 K TCLP Semi-Volatiles in Soil 1,4-Dichlorobenzene mg/L 0.00064 U 0.00064 U 2,4-Dinitrotoluene mg/L 0.00073 U 0.00073 U Hexachlorobenzene mg/L 0.0005 U 0.0005 U Hexachlorobutadiene mq/L 0.00059 U 0.00059 U Hexachloroethane mg/L 0.00071 U 0.00071 U 2-Methylphenol mg/L 0.0014 U 0.0014 U 4-Methylphenol mg/L 0.0013 U 0.0013 U Nitrobenzene mg/L 0.00075 U 0.00075 U Pentachlorophenol mg/L 0.0012 U 0.0012 U Pyridine mg/L 0.0021 U 0.0021 U 2,4,5-Trichlorophenol mg/L 0.0017 U 0.0017 U 2,4,6-Trichlorophenol mg/L 0.0017 U 0.0017 U Total Metals Analysis of TCLP Metals in Soil by ICAP Arsenic mg/kg 2.6 U 2.6 U 5.2 Barium mg/kg 15 15.2 124 Cadmium mg/kg 0.52 U 0.52 U 0.67 U Chromium mg/kg 5.5 U 4.2 U 11.4 Lead mg/kg 3.1 6.1 27.6 Selenium mg/kg 5.2 U 5.2 U 6.7 U Silver mg/kg 0.52 U 0.52 U 0.67 U Total Semivolatiles of TCLP compounds in Solids 1,4-Dichlorobenzene ug/kg 200 U 200 U 26 U 2,4-Dinitrotoluene ug/kg 160 U 160 U 20 U Hexachlorobenzene ug/kg 230 U 230 U 30 U Hexachlorobutadiene ug/kg 190 190 U U 24 U Hexachloroethane ug/kg 260 U 260 U 33 U 2-Methylphenol ug/kg 740 U 740 U 96 U 4-Methylphenol ug/kg 610 U 610 U 78 U Nitrobenzene ug/kg 220 U 220 U 29 U Pentachlorophenol ug/kg 410 U 410 U 54 U Pyridine ug/kg 3400 U 3400 U 440 U 2,4,5-Trichlorophenol ug/kg 370 U 370 U 48 U 2,4,6-Trichlorophenol ug/kg

360 U 360 U 47 U

Activity Desc: Missouri Tie and Timber

RLAB Approved Sample Analysis Results

Analysis / Analyte	Units	205		208		
Metals in Water by ICP						
Aluminum	ug/L	10900		100	U	
Antimony	ug/L	20 L	j	20		
Arsenic	ug/L	25 L		25		
Barium	ug/L	86.3		30	_	
Beryllium	ug/L	1 L	J	1	U	
Cadmium	ug/L	5 L		5		
Calcium	mg/L	12.7		48.6		
Chromium	ug/L	13.6		5.2		
Cobalt	ug/L	5 L	J	5	U	
Copper	ug/L	10 L		10		
Iron	ug/L	8980		50		
Lead	ug/L	25 L	I	25		
Magnesium	mg/L	6.4		26.7	-	
Manganese	ug/L	130		5	U	
Molybdenum	ug/L	10 L	1	10		
Nickel	ug/L	15 (15		
Potassium	mg/L	3.6	_		U	
Selenium	ug/L	50 U		50		
Silver	ug/L	50 t			U T	
Sodium	mg/L	5.4	U	3.2	U	
Thallium	ug/L	30 (3.2	11	
Titanium	ug/L	139	U			
Vanadium	ug/L				U	
Zinc	ug/L ug/L	23.8 22.9			U	
pH of Water	ug/L	22.9		72		
pH pH	SU	7.2		7.5		
Semi-Volatile Organic Compounds i		7.2		7.5		
		0.40				
Acenaphthene	ug/L	0.16		0.16		
Acenaphthylene	ug/L	0.2		0.2		
Anthracene Benzo(a)anthracene	ug/L	0.14		0.14		
	ug/L	0.099		0.099		
Benzo(a)pyrene	ug/L	0.1		0.1		
Benzo(b)fluoranthene	ug/L	0.13		0.13		
Benzo(g,h,i)perylene	ug/L	0.11		0.11		
Benzo(k)fluoranthene	ug/L	0.12		0.12		
Benzoic acid	ug/L	1.3		1.3		
Benzyl alcohol	ug/L	0.96		0.96		
bis(2-Chloroethoxy)methane	ug/L	0.32		0.32		
bis(2-Chloroethyl)ether	ug/L 	0.4			U	
bis(2-Chloroisopropyl)ether	ug/L 	0.33		0.33		
bis(2-Ethylhexyl)phthalate	ug/L	0.83		0.83		
4-Bromophenyl-phenylether	ug/L	0.35		0.35		
Butylbenzylphthalate	ug/L	0.94		0.94	U	
Carbazole	ug/L		U		2 U	
4-Chloro-3-methylphenol	ug/L	1.2	U	1.2	. U	
4-Chloroaniline	ug/L	1.2	U	1.2	2 U	
2-Chloronaphthalene	ug/L	0.69	U	0.69	U	
2-Chlorophenol	ug/L	1.3	U	1.3	3 U	

ASR Number: 827

Activity Desc: Missouri Tie and Timber

RLAB Approved Sample Analysis Results

nalysis / Analyte	Units	205	208	
4-Chlorophenyl-phenylether	ug/L	0.28 U	0.28 U	
Chrysene	ug/L	0.11 U	0.11 U	
Di-n-butylphthalate	ug/L	0.31 U	0.31 U	
Di-n-octylphthalate	ug/L	0.31 U	0.31 U	
Dibenz(a,h)anthracene	ug/L	0.13 U	0.13 U	
Dibenzofuran	ug/L	0.6 U	0.6 U	
1,2-Dichlorobenzene	ug/L	0.86 U	0.86 U	
1,3-Dichlorobenzene	ug/L	0.54 U	0.54 U	
1,4-Dichlorobenzene	ug/L	0.64 U	0.64 U	
3,3'-Dichlorobenzidine	ug/L	1.4 U	1.4 U	
2,4-Dichlorophenol	ug/L	1.2 U	1.2 U	
Diethylphthalate	ug/L	0.3 U	0.3 U	
2,4-Dimethylphenol	ug/L	1.5 U	1.5 U	
Dimethylphthalate	ug/L	0.23 U	0.23 U	
4,6-Dinitro-2-methylphenol	ug/L	2 U	2 U	
2,4-Dinitrophenol	ug/L	2.4 U	2.4 U	
2,4-Dinitrotoluene	ug/L	0.73 U	0.73 U	
2,6-Dinitrotoluene	ug/L	0.89 U	0.89 U	
Fluoranthene W120	ug/L	1.3	0.12 U	
Fluorene	ug/L	0.17 U	0.17 U	
Hexachlorobenzene	ug/L	0.5 U	0.5 U	
Hexachlorobutadiene	ug/L	0.59 U	0.59 U	
Hexachlorocyclopentadiene	ug/L	0.6 U	0.6 U	
Hexachloroethane	ug/L	0.71 U	0.71 U	
Indeno(1,2,3-cd)pyrene	ug/L	0.15 U	0.15 U	
Isophorone	ug/L	0.81 U	0.81 U	
2-Methylnaphthalene	ug/L	0.72 U	0.72 U	
2-Methylphenol	ug/L	1.4 U	1.4 U	
4-Methylphenol	ug/L	1.3 U	1.3 U	
Naphthalene	ug/L	0.18 U	0.18 U	
2-Nitroaniline	ug/L	0.78 U	0.78 U	*
3-Nitroaniline	ug/L	0.53 U	0.53 U	
4-Nitroaniline	ug/L	0.86 U	0.86 U	
Nitrobenzene	ug/L	0.75 U	0.75 U	
2-Nitrophenol	ug/L	1.3 U	1.3 U	
4-Nitrophenol	ug/L	1.4 U	1.4 U	
N-nitroso-di-n-propylamine	ug/L	0.41 U	0.41 U	
N-nitrosodiphenylamine	ug/L	0.33 U	0.33 U	
Pentachlorophenol	ug/L	1.2 U	1.2 U	
Phenanthrene	ug/L	0.11 U	0.11 U	
Phenol	ug/L	1.1 U	1.1 U	
Pyrene	ug/L	0.092 U	0.092 U	
1,2,4-Trichlorobenzene	ug/L	0.7 U	0.7 U	
2,4,5-Trichlorophenol	ug/L	1.7 U	. 1.7 U	el 2
2,4,6-Trichlorophenol	ug/L	1.7 U	1.7 U	